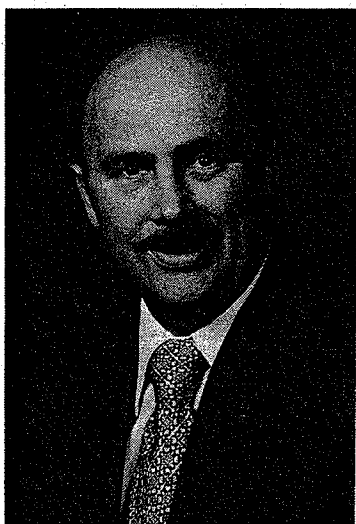


SPENDING PATTERNS OF COLLEGE STUDENTS WHO RECEIVE MONETARY AWARDS FROM A STATE SCHOLARSHIP COMMISSION

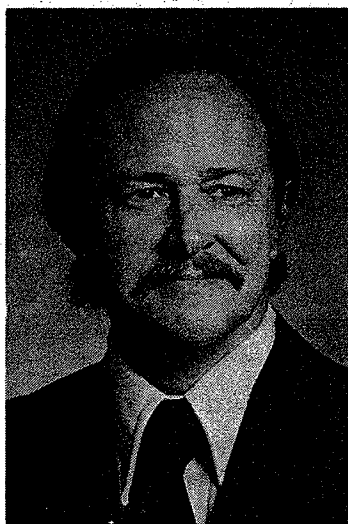
by E. James Maxey, Robert H. Fenske and Joseph B. Boyd

The problem of determining levels of expenditures for college costs by students continues to be a vexing one for the student financial aid community. Unquestionably, such expenditures are a vital element of need analysis, the concept on which the vast majority of grant and scholarship funds are now awarded. Need analysis focuses on two principal concerns. One is the fair and equitable determination of family resources. Although by no means a closed issue, a consensual model has been developed by the National Task Force on Student Aid Problems (1975). The other side of the need analysis equation is the costs to the student involved in attending college, and is an issue that has eluded a consensual resolution.

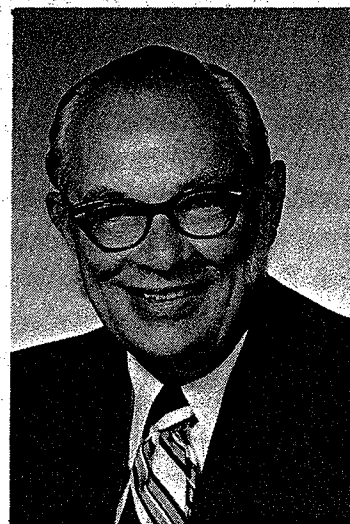
The problem is two-fold. First, there have been only a few scattered efforts to compile and analyze empirical data on actual student expenditures. Second, the financial aid community has only just begun to formulate standardized procedures to estimate student expenditures so that hypothetical but plausible budgets can be uniformly established by an institution or set of institutions.



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Review of Literature

A conference held in March, 1977, attempted to begin the process of establishing uniform standards of estimating student budgets (Clark, 1977). The purpose of the conference "was to discuss and clarify the philosophical issues of student expense budgets" (p. iii). As such, it did not define parameters for actually constructing student expense budgets. However, it did point out that "some systematic research is essential in establishing accurate and adequate student budgets for financial aid recipients" and that "student budget research is a fundamental part of responsible administration of federal, state, and institutional aid funds..." (p. 87).

Data about approximate costs are supplied by colleges and universities to the two major national need analysis processing agencies and are, in turn, routinely provided to prospective financial aid applicants (The American College Testing Program, 1977; College Scholarship Service of the College Entrance Examination Board, 1977). For example, the American College Testing (ACT) Program lists tuition and fees of colleges designated by testees on score reports sent to students. Furthermore, ACT's *College Planning/Search Book* for students contains budget tables for assistance in estimating college costs at three hypothetical colleges (p. 13, 1977).

However, it must be noted that the above information is based on estimates which are generated by colleges on a widely varying basis, ranging from rough estimates to systematic and sophisticated data gathering and analysis procedures.

There are some indications that the paucity of empirical data on student expenditures is currently being remedied to some degree. Recently, a consulting firm under government contract assembled and analyzed available information on college expenses for three categories of students who were not residents on campuses (Dean, et al., 1977). The researchers discovered four files of data which are, to some degree, nationally representative of postsecondary students and which specified expenditures for the non-resident student categories defined for the project. The data files were those gathered by the College Scholarship Service in two surveys conducted in 1968-69, the National Longitudinal Study of 1972 high school graduates, and the Bureau of the Census survey of postsecondary students in 1973. Data from the four files were analyzed and collated to determine comparability. As might be expected from examination of secondary data from unrelated studies, there were few common or comparable findings among the data sets. For example, some averages were reported as means, others as medians. Despite these limitations, the researchers integrated the data to provide the following approximations for single students (with the caveat that "extreme caution should be exercised in using these estimates for decision-making or analysis purposes," [p. 49]. In 1974-75, five types of expenditures (Housing, Food, Transportation, Medical, and Miscellaneous) totaled \$536 for students financially dependent on parents and living at home, \$1,603 for financially dependent students not living at home, and \$2,476 for students not living at home who were financially independent of their parents (p. 41). It should be noted that these figures do not include tuition and fees, an omission that, somewhat curiously, was not explained by the researchers.

At a different level of specificity, it can be assumed that many institutions have conducted surveys of expenditures by their students. However, if the assumption is true, it remains undocumented since very few are cited or published in the research literature of the field. An example of such a survey is one conducted at the University of Minnesota in the 1974-75 academic year (Hendricks, G. and K. Skinner, 1975). This survey replicated two earlier student expenditure studies at the University (Stecklein, Fenske and Huang, 1967, and Comstock, 1970) and focused on "reported out-of-pocket costs which are incurred by students themselves in attending school as full-time undergraduate students" (p. 1.3). Over two-thirds (68%) of the sample returned usable questionnaires (n=601), and reported a mean total annual expense of \$2,690, with 48% of the respondents indicating that they received some financial assistance from their parents.

After a further search of the literature, it was concluded that no survey of student expenditures which had a statewide purview had recently been conducted and reported. Since much student financial aid is administered through state agencies, it seemed that the present study would be a useful addition to the professional literature. (The past two decades have witnessed the growth in number of state student financial aid programs from approximately 12 in 1957 to 42 in the 1977-78 academic year. The total funds administered by these agencies has increased from \$100,000,000 to over \$700,000,00 during this period.)

Purpose of the Study

The Illinois State Scholarship Commission was founded in 1958-59 and is now one of the four largest state student grant programs in the United States. During its 20 year history, the Commission has grown from awarding \$600,000 to 1,458 recipients in 1958-59 to over \$78,000,000 to 95,200 recipients in 1977-78.

Beginning in 1967-68, the Commission surveyed random samples of scholarship and grant monetary award recipients in April of each year for the academic years 1967-68, 1970-71, 1973-74, and 1976-77. In each of the surveys, 1,000 scholarship winners were contacted. In the first two surveys, 1,000 grant recipients were surveyed, and, because of the growth of the grant program, 2,000 grant recipients were questioned the last two times.

The 1976-77 survey contained a section that was not part of the first three surveys. The questions in this section asked the students to identify to the nearest dollar actual expenses for the academic year 1976-77. Costs were requested for: tuition and fees, room and board, books and supplies, medical/dental expenses, transportation, clothing, entertainment, personal items, child care, support to relatives, other expenses, and total academic year expenses. A total of 1,254 questionnaires was analyzed. These data are reported as median expenses for students who received state aid at different income levels, dependency categories, levels of loans received, commuter/resident status, and type of college attended.

Median expense data for students who have received financial aid from a statewide scholarship commission should provide college administrators at the local campus level some guidelines in establishing their own student expense budgets. Using typical expense data for a statewide sample of students with different backgrounds may enable the local aid administrator to develop budgets that more adequately reflect the spending patterns of students at the college.

Results

College officials are faced with the continuing task of building realistic budgets. Because so many different types of college students now receive assistance from national and/or state funds, typical expense patterns for the variety of students who receive state aid should prove useful to those responsible for establishing student budgets. Typical expenditures were analyzed for different subgroups in this study.

Median expenditures by family income are shown in Table 1.

The trend shown in Table 1 indicates that as income levels increase, the media tuition and fees paid by students increases in a linear fashion. For students from families with incomes below \$17,500, there was a tendency for those students to pay around \$700 for tuition and fees. For students above \$17,500, the median tuition and fees figure was well over \$1,200. Probably the higher family income levels reflect the tuition and fees paid at private institutions by these students who have received state aid since there is a tendency for private college students to be from families with high income levels (El-Khawas, E., 1976). A similar pattern exists for room and board expenses. For students from families with incomes below \$17,500, the typical room and board expense was about \$1,200 although at low income levels the typical room and board expense was approximately \$1,000. However, at higher income levels, the typical room and board expense was well over \$1,200 for the data available. As expected, a relatively constant pattern exists for books and supplies since these do not vary by kind of institution attended.

Students from the middle income levels spent about \$50 a year for medical and dental costs, but students at the higher income levels spent less on such expenses. This may be due to the fact that students from upper income levels have their medical and dental costs covered by private or family insurance programs. Also, students at the higher income levels tended to spend, on the average, more money for entertainment than did students from lower income levels.

The data in this table seem to reflect what we already know to be true about spending habits of people from different income levels. People who have more discretionary money to spend, spend more money for variable educational costs. People who have less money to spend, spend less money for their overall educational experience. The data reflected in the grand total expenses in Table 1 for students from different income levels, suggest that the pattern of the spending habits of students correlates directly with the family income level.

The data in Table 2 describes the median expenses of students from the two categories of dependency. The data are reported for students who were self-supporting or independent as well as students who were dependent on their families for their source of income. As we have noted elsewhere (Boyd, J., Fenske, R., and Maxey, J., 1978), students listed as tax dependents by parents do not necessarily receive significant support from that source, in fact they may receive no funds whatever. In general, however, most students categorized here as "dependent" do receive substantial funds for college costs from their parents.

Table 1
Median Expenditures by Family Income Levels

Variable	Less than 5,000 (N=107)	5,000- 9,999 (N=131)	10,000- 12,499 (N=205)	12,500- 14,999 (N=157)	15,000- 17,499 (N=143)	17,500- 19,999 (N=154)	20,000- 24,999 (N=121)	25,000- 29,999 (N=156)	Over 30,000 (N=47)	Not Applicable (N=23)	Missing Income (N=117)	Total
1. Tuition and fees	\$ 690	\$ 700	\$ 712	\$ 687	\$ 700	\$1,240	\$1,600	\$2,401	\$2,562	\$2,550	\$ 690	\$ 780
2. Room and board	1,000	900	1,248	1,100	1,201	1,200	1,270	1,301	1,400	1,493	998	1,200
3. Books/supplies	149	150	150	150	150	150	151	151	198	175	150	150
4. Medical/dental costs	15	48	40	49	50	50	40	26	20	35	15	40
5. Transportation	150	200	150	140	110	126	120	120	100	99	150	139
6. Clothing	102	152	150	125	149	150	140	149	151	195	102	150
7. Entertainment	60	52	75	99	115	100	110	101	110	150	70	100
8. Personal expenses	80	60	75	76	99	73	75	81	61	115	80	75
9. Child care	<1	<1	<1	<1	<1	1	1	2	1	3	1	<1
10. Support to relatives	<1	<1	1	1	1	1	0	<1	0	0	1	<1
11. Other expenses	1	1	<1	1	<1	<1	<1	<1	27	53	1	<1
12. Grand total expenses*	\$3,387	\$3,160	\$3,447	\$3,282	\$3,650	\$3,551	\$3,954	\$4,671	\$5,446	\$5,400	\$3,334	

*The Grand total median expenses were computed by finding the arithmetic sum of individual expenditures for each student. Grand total expenditures shown are *not* column totals. The median of the Grand total expenses is not the sum of the medians for each variable.

Table 2
Median Expenses by Dependency Status

Variable	Self/Supporting Independent ¹ (N=309)	Dependent ² (N=904)	Total (N=1254)
1. Tuition and fees	\$ 716	\$ 873	\$ 780
2. Room and board	1,260	1,200	1,200
3. Books/supplies	150	150	150
4. Medical/dental costs	50	35	40
5. Transportation	200	130	139
6. Clothing	150	150	150
7. Entertainment	100	100	100
8. Personal expenses	100	70	75
9. Child care	<1	<1	<1
10. Support to relatives	<1	<1	<1
11. Other expenses	<1	<1	<1
12. Grand total expenses	\$4,065	\$3,762	\$3,260

¹Verified as no longer claimed as tax dependents by parents or guardians.

²Students claimed as tax dependents by parents or guardians in tax year preceding ISSC award for 1976-77.

As would be expected, students who were dependent tended to spend more money for tuition and fees than students who were self-supporting. On the other hand, students who were self-supporting spent, on the average, more money for room and board, probably meaning that they lived in private apartments or rented their own homes. Books and supplies, as expected, were the same for both types of students. Self-supporting students tended to spend more money for their medical and dental costs. Students who are dependent on their parents probably rely more on family insurance programs for meeting their medical and dental costs. Self-supporting students spent more money for transportation, probably reflecting the fact that they had to commute to classes from their rooms or private homes. About the same amount of money was spent for clothing and entertainment; however, self-supporting students had slightly more personal costs. Overall, the grand total expenses of students who are self-supporting exceeds that of dependent students on the average by about \$303 per year, principally in the variable maintenance categories of room and board, transportation, and personal costs.

The data in Table 3 reflect median expenditures of students with different levels of loans received. These loans could be from either private or public sources. The loan could have been from the Illinois Guaranteed Loan Program, National Direct Student Loan, or from parents or relatives.

The data in this table indicate that as the level of loan increased, the amount of money that students paid for tuition and fees also increased. There is a strong association between level of the loan and the amount of money paid for these costs. A similar pattern exists for room and board. As the level of loan increased, the amount of money that students were willing to pay for room and board also increased. Apparently, students who were willing to borrow more money for college were also willing to spend more money for their college experience. They tended to spend more money for medical and dental costs; they spent more money on the average for transportation. There was a tendency for students from higher loan levels to spend more money for clothing and more money for entertainment. In-

Table 3
Median Expenditures by Levels of Total Loans Received

Variable	Level of Loan						
	0 (N=847)	1-500 (N=137)	501-1000 (N=160)	1001-1500 (N=62)	1501-2000 (N=29)	2001-2500 (N=14)	Over 2500 (N=5)
1. Tuition and fees	\$ 700	\$ 795	\$2,563	\$2,500	\$2,200	\$2,354	\$3,067
2. Room and board	1,000	1,264	1,400	1,406	1,404	1,638	1,352
3. Books/supplies	150	150	200	200	200	155	155
4. Medical/dental costs	40	20	40	48	98	55	19
5. Transportation	150	100	100	102	180	145	300
6. Clothing	150	150	150	127	202	150	300
7. Entertainment	94	101	100	124	151	155	17
8. Personal expenses	70	90	75	100	102	103	288
9. Child care	<1	<1	<1	1	0	8	0
10. Support to relatives	<1	<1	<1	0	0	0	0
11. Other expenses	<1	1	<1	7	9	34	237
12. Grand total expenses	\$3,275	\$4,223	\$5,200	\$5,329	\$5,255	\$5,173	\$5,800

spection of the table indicates that the grand total expenses across levels of loan progresses in a linear fashion from a typical grand total of about \$3,275 for those who had no loans, to a median total expenditure of \$5,800 for those who had borrowed over \$2,500. It should be noted that the great majority of students who receive state aid do not have any loans. Eight hundred forty-seven of the 1,254 students, roughly two-thirds, did not have any loans outstanding at all during 1976-77. The data may indicate that in order to attend a higher cost institution, students who do receive state aid money must borrow to meet the college costs.

The median expenditures for students who received state aid are given in Table 4. In this table, data are provided to show the median or typical costs of students who attended either a public or private institution.

Table 4
Median Expenditures by Type of College

Variable	Public (N=644)	Private (N=569)
1. Tuition and fees	\$ 604	\$2,538
2. Room and board	1,200	1,260
3. Books/supplies	140	175
4. Medical/dental costs	40	40
5. Transportation	150	125
6. Clothing	126	150
7. Entertainment	100	100
8. Personal expenses	75	75
9. Child care	<1	<1
10. Support to relatives	<1	<1
11. Other expenses	<1	<1
12. Grand total expenses	\$2,562	\$4,715

Students who attended public institutions spent on the average about one fourth as much money as students at private institutions for tuition and fees. Room and board costs were more expensive at private institutions, as were books and supplies. On the other hand, students who attended public institutions spent, on the average, more money for transportation than students at private institu-

tions. These findings agree with El-Khawas (1978) as noted above. These expenditures reflect the fact that many students who attended public institutions lived at home and commuted some distance to classes.

Students who attended private institutions spent more money for their education, probably came from families at upper income levels, and had more discretionary money to spend on clothing. The data in Table 4 substantiate this last expectation; the median cost for clothing for those who attended private institution was significantly higher than for those who attended public institutions. Entertainment costs were about the same, as were personal expenses, for students who attended these two types of institutions. In general, students who received state aid and who attended a public institution spent about \$2,200 less on the average per year for their educational program than students who attended private institutions. Most of this difference was attributable to the much higher tuition at private institutions.

In Table 5, the median expenditures by commuter and resident students are offered. Data for two types of commuter students are reported. Students who lived at home with parents or relatives and commuted were called Commuter A students. Students who lived in their own home or apartment and commuted were called Commuter B students.

Table 5
Median Expenditures by Commuter/Resident Students

Variable	Commuter A (parents/relatives' home) (N=366)	Commuter B (own home/apt.) (N=284)	Living on campus (N=577)
1. Tuition and fees	\$ 793	\$ 688	\$1,360
2. Room and board	1	1,281	1,350
3. Books/supplies	150	149	150
4. Medical/dental costs	50	50	20
5. Transportation	216	199	85
6. Clothing	151	149	125
7. Entertainment	100	75	100
8. Personal expenses	50	100	75
9. Child care	<1	<1	<1
10. Support to relatives	<1	<1	<1
11. Other expenses	<1	<1	<1
12. Grand total expenses	\$2,700	\$3,451	\$3,514

Commuter students tended to spend substantially less for tuition and fees than those who lived on the campus. This may mean that many 1976-77 commuter students who received aid from the state of Illinois attended community colleges and thus commuted more to those low cost institutions. Inspection of the table also indicates that students who lived on the campus spent more for room and board than commuters who lived in their own home or apartment. On the other hand, commuters who lived with their parents had virtually no room and board expenses. Apparently, nearly all students who lived at home with relatives or parents were dependent students.

The amount of money spent by both commuters and residents for books and supplies was about the same. Medical and dental costs were higher for commuters than they were for those living on campus. As would be expected, transportation costs were higher for commuters. Entertainment costs for the two types of stu-

dents were about the same, except those who had their own room or apartment had lower entertainment costs. This may be a reflection of the availability of money to those persons; a greater portion of their income may have been used for necessities and they may not have had as much extra money for entertainment.

Students who had their own home or apartment had, on the average, higher personal expenses than did students who were commuters living at home. And, students who lived on the campus had higher personal expenses than commuters living with parents or relatives. Persons living at home typically had lower personal expenses, at least those recorded as the students' direct expenditures, perhaps because the parents paid for some of the personal expenses of the student. On the average, the median grand total expenses of those students who were commuters and lived in their own apartment or home was less than \$100 different from students who lived on the campus. On the other hand, students who lived with parents or relatives and commuted to college typically spent about \$700 less than the other two groups of students.

Discussion

During the last several years, colleges have experienced increased operating costs and leveling off of enrollments. At the same time, student assistance funds have become a growing source of economic stability for many public as well as private institutions. Because students contribute heavily toward the operating budget of an institution, it is important to know the typical spending pattern for students who have received aid from state funds. Furthermore, most colleges and universities develop and publicize hypothetical student budgets to assist potential enrollees in planning to meet college costs.

Of all the expenditure comparisons made among the subgroups included in this report, the sharpest distinction was in tuition and fees between public and private institutions. Furthermore, this distinction seemed associated between spending patterns and the background characteristics of students; for example, student expenses differed by family income.

In fact, this distinction suggests that the "profiles" of public versus private college students differ sharply. Compared with private college students, public college students are more likely to be commuters rather than residents on their campuses, have families with lower income levels, have smaller educational loans, and are more likely to be self-supporting rather than dependent on their parents for help with college costs. These generalized differences are substantiated by the pattern of expenditures shown in the data above. Private college students spend more money for discretionary purposes than do public college students.

It is hoped that the information provided in this descriptive report will encourage financial aid administrators to learn more about the spending habits of students.

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